

I CLAIM:

1. A high-efficiency thermal conductive base board for electrical connection with an electronic component comprising:

5 a metal substrate;
 a metal oxide layer formed on said metal substrate;
and

 a plurality of conductive contacts formed on said metal oxide layer for electrical connection with the
10 electronic component.

2. The high-efficiency thermal conductive base board of claim 1, wherein said metal substrate is made from a metal selected from the group consisting of aluminum, titanium, magnesium, zirconium, beryllium,
15 tantalum and alloys thereof.

3. The high-efficiency thermal conductive base board of claim 2, wherein said metal oxide layer is made from a metal oxide selected from the group consisting of alumina, titania, magnesia, zirconia,
20 beryllia, tantalum oxide and mixtures thereof.

4. The high-efficiency thermal conductive base board of claim 3, wherein said metal substrate is made from aluminum and said metal oxide layer is made from alumina.

25 5. The high-efficiency thermal conductive base board of claim 1; wherein said conductive contacts are made from a metal selected from the group

consisting of copper, silver, zinc, titanium and tungsten.

5 6. The high-efficiency thermal conductive base board of claim 5, wherein said conductive contacts are made from copper.